

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

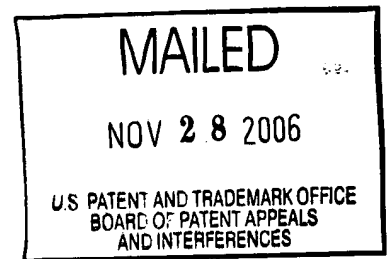
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALEXANDER E. MERICAS

Appeal No. 2006-3328
Application No. 09/931,308

ON BRIEF



Before THOMAS, HAIRSTON, and RUGGIERO, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 2, 4, 5, 8, 9, 11 through 14, 16 and 17.

The disclosed invention relates to a method and system for monitoring the occurrences of one or more events related to the operation of a processor. The processor includes a performance monitor with a plurality of counting elements. The monitoring of the processor operation includes the steps of identifying the

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number of events to be counted by the performance monitor,
identifying the number of counting elements available to count
incidences of the events and dividing the number of available
counting elements by the number of events to be counted.

Claim 1 is illustrative of the claimed invention, and it
reads as follows:

1. A method for monitoring the occurrences of one or more
events related to the operation of a processor, said
processor including a performance monitor having a plurality
of counting elements, said method comprising the steps of:

identifying the number of events to be counted by said
performance monitor;

identifying the number of counting elements available
to count incidences of said events; and

assigning at least two of said counting elements to
serially count incidences of at least one of said events,
wherein when the number of events to be counted is less than
the number of counting elements available to count
incidences of said events, said assingning step comprising
at least the steps of:

dividing the number of available counting elements by
the number of events to be counted;

in a first assignment step, assigning a number of
counting elements, said number equal to the integer
resulting from said dividing step, to each of said events to
be counted; and

in a second assignment step, assigning any unassigned
counting elements to at least one of said events.

The references relied on by the examiner are:

| | | |
|----------------------|---------------------------------------|----------------|
| Gover et al. (Gover) | 5,557,548 | Sept. 17, 1996 |
| Dharap | 2002/0026524 | Feb. 28, 2002 |
| | (effective filing date Aug. 31, 2000) | |

Claims 1, 2, 4, 5, 8, 9, 11 through 14, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gover in view of Dharap.

Reference is made to the brief and the answer for the respective positions of the appellant and the examiner.

OPINION

For all of the reasons expressed by the appellant, and for the additional reasons set forth infra, the obviousness rejection of claims 1, 2, 4, 5, 8, 9, 11 through 14, 16 and 17 is reversed.

We agree with the appellant's statement (brief, page 10) that the monitor mode control register (MMCR) 36 in Gover (Figure 2) "allows control over which PMCs [performance monitor counters] are used to monitor which events, and this control enables the ability of certain of the PMCs to be used for overflow of other PMCs." We additionally agree with the appellant's statement (brief, page 10) that "the present invention improves upon the functionality of Gover by enabling the MMCR to calculate the optimal division of the PMCs among the events being monitored, when there are fewer events than PMCs." Appellant notes that the "division calculation is explicitly claimed in all of the independent claims" (brief, page 10).

For a division teaching, the examiner turns to Dharap which describes a method for converting a list of data to a format suitable for display and manipulation in a limited display area

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(e.g., a cellular telephone display) (Abstract; paragraph 0020). The list of data "may be granularized by dividing the total number of table entries by the number of available entries, and an abbreviated list 104 arranged for display as a WAP [wireless application protocol] page on a cellular phone" (paragraph 0025).

The examiner contends (answer, page 5) that it would have been obvious to one of ordinary skill in the art to modify Gover with the division step taught by Dharap because "Dharap suggests a method pertinent to the particular problem of distributing items that would have provided means for correctly, accurately, and evenly assigning the counters to events of Gover (0025-0026)."

Appellant argues (brief, pages 8 and 9) that Dharap is non-analogous art because the invention disclosed therein is not within the field of the appellant's endeavor and because the problem solved by Dharap is not pertinent to the problem solved by appellant. We agree with the appellant's arguments that a reference concerned with manipulating data so that it will fit within the limited confines of a cellular telephone display is non-analogous art to the disclosed and claimed invention which is concerned with dividing the number of available counting elements in a performance monitor by the number of events to be counted by the monitor. We also agree with the appellant's argument (brief,

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pages 10 and 11) that it is not possible to establish a prima facie case of obviousness with the teachings of Gover and Dharap.


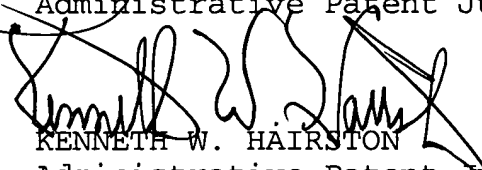
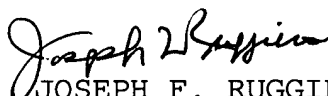
In summary, the obviousness rejection of claims 1, 2, 4, 5, 8, 9, 11 through 14, 16 and 17 is reversed.

DECISION

The decision of the examiner rejecting claims 1, 2, 4, 5, 8, 9, 11 through 14, 16 and 17 under 35 U.S.C. § 103(a) is reversed.

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REVERSED


JAMES D. THOMAS)
Administrative Patent Judge)
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KENNETH W. HAIRSTON)
Administrative Patent Judge)
)
)

JOSEPH F. RUGGIERO)
Administrative Patent Judge)

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